

Serial No. 09/745,345  
Reply to Office Action of March 11, 2004  
Reply dated **JUNE 10, 2004**

Docket No. P-0172

**Amendments to the Specification:**

*Please replace the fifth full paragraph on page 1 with the following amended paragraph:*

21 A control logic 7 generates a signal to access the first buffer unit 6, a second buffer unit 9 and a CAM 8, and the CAM (Content Addressable Memory) 8 stores a ~~VPI (Virtual Path Identifier/VCI (Virtual Channel Identifier))~~ VPI (Virtual Path Identifier)/VCI (Virtual Channel Identifier) which corresponds to the time slot number in a look-up table form.

*Please replace the first full paragraph on page 2 with the following amended paragraph:*

42 The controlling unit 5 ~~write~~ writes a control data of the SAR controller 2 in the SRAM 4 and inserts and ~~clear~~ clears input/output data of the CAM 8 when a call is connected and released.

*Please replace the fifth full paragraph on page 2 with the following amended paragraph:*

43 When a call is connected, ~~[[a]]~~ time slot data switched by the time switch 1 are sequentially stored in the SRAM 4 through the SAR controller 2 and the buffer 3.

*Please replace the seventh full paragraph which bridges pages 2 and 3 with the following amended paragraph:*

44 The CAM ~~[[17]]~~ 8 outputs the VPI/VCI corresponding to the input time slot number to the control logic 7 on the basis of the VPI/VCI information and the time slot number

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a.4 provided from the controlling unit 5 when a call is connected.

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*Please replace the first full paragraph on page 3 with the following amended paragraph:*

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a.5 Accordingly, the control logic 7 substitutes the time slot number with the VPI/VCI read from the CAM [[17]] 8, reads a payload of the ATM cell from the first buffer unit 6 and stores it in the second buffer unit 9.

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*Please replace the fourth full paragraph on page 4 with the following amended paragraph:*

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a.6 Still another object of the present invention is to provide an ATM cell receiving device of an ATM switching system which is capable of demultiplexing a CPS (Common Part Sublayer) packet having different CIDs in a single ATM cell, to a plurality of time slots

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*Please replace the second full paragraph on page 7 with the following amended paragraph:*

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a.7 The time slot input unit 200 20 includes a time switch 21 for switching a 64Kbps time slot, an input buffer unit 22 having N number of small capacity of buffers (buffer 0 ~ buffer N) for storing N number of time slot data outputted from the time switch 20; and a multiplexer (MUX) 22 for searching the N number of small capacity of buffers (buffer 0 ~ buffer N) and selectively outputting a time slot data stored in an effective buffer.

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*Please replace second and third full paragraphs on page 8 with the following amended paragraph:*

When a call is connected, 1024 time slot data switched by the time switch 21 are stored in buffers (buffer 0 ~ buffer 1023) by numbers, and thereby the controlling unit 10 puts the first byte of the effective buffers storing the time slot data in a valid state.

a8 And, the controlling unit 10 writes the CPS-packet header in the packet header storing unit 31 into an input time slot unit and writes the ATM buffer number corresponding to the time slot number/CID into the CAM 40. Besides, the controlling unit 10 writes a VPI/VCI matching the ATM buffer number of the CAM ~~400~~ 40 into the ATM header generating unit 52, and sets a time-out time of the timer ~~600~~ 60.

*Please replace the sixth full paragraph which bridges pages 8 and 9 with the following amended paragraph:*

a9 The CPS packet header includes a time slot ~~field~~ field, a channel identifier (CID) field for identifying a plurality of users in a single virtual channel (VC), a length identifier (LI) field for representing the size of an effective load of a CPS packet, a user-to-user indication field for discriminating a CPS user and a network manager, and a header error control (HEC) field for correcting an error of a CPS packet header.

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*Please replace the first full paragraph on page 9 with the following amended paragraph:*

910 In addition, a ~~CPS-INFO~~ CPS-INFO forming a CPS packet payload is ~~[[a]]~~ the time slot data outputted from the multiplexer 23, the length of which is allocated by the controlling unit 10.

*Please replace the fifth full paragraph which bridges pages 9 and 10 with the following amended paragraph:*

911 The time period taken for outputting of the ATM cell from the transmitting buffer 53 is determined by the timer 60. That is, the transmitting buffer 53 is triggered by a time-out signal outputted from the timer 60. Thus, unless the 48 byte data is wholly received from the ATM buffer unit 50 for a predetermined time, the transmitting buffer 53 sets the data that are yet to be received as '0' and completes 53 byte ATM cell. Therefore, in the present invention, it is not necessary to wait until 53 byte data is wholly received as in the ~~present invention~~, conventional art so that transmission delay of the ATM cell is prevented.

*Please replace the sixth full paragraph which bridges pages 11 and 12 with the following amended paragraph:*

912 First, the receiving buffer 201 stores an ATM cell transmitted through the ATM network. The received one ATM cell includes a 5 byte ATM cell ~~header~~ header and a 48

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G.12 byte CPS-PDU (Protocol Data Unit). The CPS-PDU includes a start field and a CPS-PDU payload. The start field includes an offset field (OSF), a sequence number (SN) and a parity (P).

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